What is claimed is:

1. A user information structure having a multiple multi-level hierarchical structure to be used in providing information to a user according to the personal preference of the information in a multi-media environment consisting of an information providers and an information users, comprising:

personal information to identify each user;

user preference information of the identified user; and

one or more individual user preference information, each of which can be set differently depending on the user's situations such as different location, and which is located as a sub-tree of the user preference information.

2. The user information structure according to claim 1, wherein the personal information includes a unique identifier which can be used to identify said user.

3. The user information structure according to claim 1, further includes one or more history record of information usage by said user.

4. The user information structure according to claim 3, wherein the history record includes a list of information or information identifier with when and how the information is used.

5. The user information structure according to claim 4, wherein the history record includes a condition of history collection for each history record.

6.   The user information structure according to claim 5, wherein the condition of history collection includes location of the history collection.

7.   The user information structure according to claim 5, wherein the condition of history collection includes time of the history collection.

8.   The user information structure according to claim 1, further includes authorization information to identify the information which said user can access.

9.   The user information structure according to claim 1, wherein said each individual user preference information includes a user preference item and a value representing preference/non-preference information.

10.   The user information structure according to claim 9, wherein said each individual user preference information further includes a description information on the said user preference item.

11.   The user information structure according to claim 10, wherein said each user preference item includes description on the item that can be used as a condition of using the individual user preference information for searching or filtering a multi-media information.

12.   The user information structure according to claim 10 ~~or 11~~, wherein said each individual user preference information has a hierarchical

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relationship.

13.   The user information structure according to claim 11, wherein said each user preference item has a hierarchical relationship.

14.   The user information structure according to claim 12 ~~or 13,~~ wherein said hierarchical relationships are hierarchical tree structures.

15.   The user information structure according to claim 1, wherein said each individual user preference information can be differently set depending -on said user's selection or said user's terminal device.

16.   The user information structure according to claim 15, wherein said each individual user preference information has a hierarchical structure which is represented by the identifier of the user preference item located in the higher nodes of the tree structure.

17.   The user information structure according to claim 1, wherein said each individual user preference information has a hierarchical structure which is represented by the identifier of the user preference item coded by special coding scheme to represent a tree structure.

18.   The user information structure according to claim 1, wherein said each individual user preference information has a hierarchical structure which is represented by an external item dictionary.

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19.   The user information structure according to claim 18, wherein the hierarchical structure is represented by a coding scheme, only the individual user preference information located as the leaf nodes of the hierarchical tree structure are stored, and the individual user preference information located at non-leaf nodes of the hierarchical tree structure are extracted based on the relationship among the leaf nodes and upper nodes items.

20.   A method for providing multi-media information to the information consumer using the user information with multiple hierarchical structure in the multimedia information environment where information providers provide desired information of information consumers, comprising the steps of:

establishing multiple multi-level hierarchical structure of individual user preference information distinguished by each user and each search item;

searching desired information based on the preference item with preference/non-preference information by each user and each search item; and

providing retrieved information according to the user preference information.

21.   The method according to claim 20, wherein, in the step of said providing the retrieved information, retrieval of new information is notified to the user, or information expected to be preferred by the user is recommended to the user, or information expected not to be preferred by the user is limited to access, according to the individual user preference information.

22.   A method of providing desired multimedia information to a information user, comprising the steps of:

establishing a multiple hierarchical structure having individual user preference information for each user or each group of users; and

5   changing the hierarchical structure of the individual user preference information.

23.   The method according to claim 22, wherein changing the hierarchical structure of said individual user preference information includes

10   registration of new user preference item, deletion of an existing user preference item, or changing the parent node of a sub-tree of individual user preference information.

24.   The method according to claim 23, wherein the step of changing

15   the hierarchical structure includes a step of changing the preference/non-preference value of a user preference item and changing the preference/non-preference value of a user preference items located in the ancestor nodes of the changed preference item, based on the usage history .

20   25.   The method according to claim 23, wherein in the step of changing the hierarchical structure of the individual user preference information, the preference/non-preference value is changed using a user interface.